

Docket No. 500.40384X00
Serial No. 09/911,715
Office Action dated March 14, 2005

REMARKS

I. Introduction

By the present Amendment, claims 1-4, 10 and 12 have been amended, and claim 5 cancelled. Claims 16-33 are newly presented for consideration. Accordingly, claims 1-4 and 6-33 remain pending in the application. Claims 1-4 and 9 are independent.

II. Office Action Summary

In the Office Action of March 14, 2005, claims 2-8, 10, and 13 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. Claims 1-3, 5-7, 9-11, 13, and 14 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,917,511 issued to Ueda. Claims 4, 8, 12, and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ueda in view of U.S. Patent 5,347,369 issued to Harrington. These rejections are respectfully traversed.

III. Rejections Under 35 USC §112

Claims 2-8, 10, and 13 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. In support of this rejection, the Office Action indicates, for example, that claims 2-4 and 10 recite the limitation "said first, second and third proof parts," whereas these claims previously recited first, second, and *intermediate* proof parts. It was not clear whether the third proof part referred to the intermediate proof part recited earlier in the claims. It was also indicated that antecedent basis for "said third proof part" was missing from claim 5.

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The cancellation of claim 5 renders part of this rejection moot. Additionally, Applicants have amended various claims to address all instances of indefiniteness raised in the Office Action.

It is therefore respectfully submitted that, as amended, the presently pending claims are in full compliance with the requirements of 35 U.S.C. §112, second paragraph.

IV. Rejections Under 35 USC §102

Claims 1-3, 5-7, 9-11, 13, and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ueda. In support of this rejection, the Office Action alleges that Ueda discloses all the features recited in these independent claims. In particular, the Office Action contends that Ueda discloses a medium test chart with data "having tone-changing areas where a tone of a color output changes in steps arranged alternately with tone-fixed areas where a predetermined tone of said color is output. The Office Action indicates that reference identifiers I1, I2, and I3 of Ueda correspond to tone changing areas, while reference identifiers D1, D2, and D3 correspond to tone-fixed areas. Reference is directed to Fig. 2; col. 4, lines 4-26.

As amended, independent claim 1 defines an image output device, for outputting a color of different tones on a medium, that comprises:

a function for outputting, on said medium, test chart data having tone-changing areas where a tone of a color output changes in steps arranged alternately with tone-fixed areas where a predetermined tone of said color is output;

input means for accepting tone information from said test chart output; and

adjusting means for adjusting output to said medium based on data for correcting said tone calculated from said tone information input.

According to independent claim 1, the data output to the test chart has tone-changing areas and tone-fixed areas that are arranged alternately with each other.

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The tone-changing areas contain a color tone that changes in steps. The tone-fixed areas contain a predetermined tone of the color. The tone-changing areas of the present invention vary in steps from a low color value (e.g., 0) to a high color value (e.g., 255). The tone-fixed areas, however, have the same color value and do not change. Thus, regardless of the color value of the tone-changing areas, the tone-fixed areas adjacent a selected tone-changing area will all have identical color values. In contrast, however, the color values of the tone-changing areas adjacent a selected tone-fixed area will have different color values. See Figs. 9-11 of the instant application. This results from the fact that tone-changing areas are provided such that “a tone of a color output changes in steps arranged alternately with tone-fixed areas where a predetermined tone of said color is output.”

Contrary to the assertions made in the Office Action, the correcting function of the Ueda differs from the claimed invention. First, Ueda does not provide tone-fixed areas. Reference identifies D1-D3 of Ueda correspond to gray-scale outputs that contain tone variations. See col. 4, lines 32-42 of Ueda. Next, Ueda discloses a correcting function that utilizes six different test charts, namely I1, D1, I2, D2, I3, and D3. Examination parts are formed from pairs of gray level sequences and gray level standards. Col. 4, lines 18-26 of Ueda. This configuration differs from the test chart of the claimed invention. Specifically, the claimed invention provides a single test chart that contains tone-changing areas wherein “a tone of a color output changes in steps arranged alternately with tone-fixed areas where a predetermined tone of said color is output.” See Figs. 7, 11, and 15 of the instant application. Furthermore, while the gray level portions of Ueda change, they clearly do not alternate in steps with respect to a tone-fixed area, as recited in independent claim 1.

It is therefore respectfully submitted that independent claim 1 is allowable over the art of record.

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Independent claim 2 defines an image output device. The device includes "tone-changing areas where a tone of a color output changes in steps arranged alternately with tone-fixed areas where a predetermined tone of said color is output." As previously discussed with respect to independent claim 1, this feature is not disclosed or suggested by Ueda.

It is therefore respectfully submitted that independent claim 2 is allowable over the art of record.

Independent claims 3 and 4 each define an image output device for printing a color of different tones on a medium. The device comprises, in part, "tone-changing areas where a tone of a color to be printed changes in steps arranged alternately with tone-fixed areas where a predetermined tone of said color is printed."

As previously discussed with respect to independent claim 1, Ueda fails to disclose or even suggest tone-changing arranged alternately with tone-fixed areas. Furthermore, Ueda does not disclose multiple areas (e.g., tone-changing and tone-fixed) on the same medium.

It is therefore respectfully submitted that independent claims 3 and 4 are allowable over the art of record.

Claims 6-8 depend, respectively, from independent claims 2-4. These claims are therefore believed allowable for at least the reasons set forth above with respect to independent claims 2-4. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

Independent claims 9-12 disclose test charts output from an image output device. Each of these claims includes certain features that are similar to features recited in independent claim 1. For example, independent claim 9 includes tone-changing areas that are arranged alternately with tone-fixed areas. Independent claims 10-12 include at least one proof part wherein tone-changing areas are

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arranged alternately with tone-fixed areas. As previously discussed with respect to independent claim 1 Ueda fails to disclose tone-changing arranged alternately with tone-fixed areas.

It is therefore respectfully submitted that independent claims 9-12 are allowable over the art of record.

Claims 13-15 depend, respectively, from independent claims 9-12.

Accordingly, these claims are believed allowable for at least the reasons set forth above with respect to independent claims 9-12. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

Claims 16-33 are newly presented for consideration, and depend from either independent claims 1-4 or 9-12. Accordingly, these claims are believed allowable over the art of record.

V. Rejections Under 35 USC §103

Claims 4, 8, 12, and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ueda in view of Harrington. As previously discussed, Ueda fails to disclose features recited 4 and 12. Furthermore, these features are also not suggested by Ueda. The inclusion of Harrington as a secondary reference does not overcome this deficiency, as Harrington also fails to even suggest the features that are missing from Ueda.

It is therefore respectfully submitted that claims 4, 8, 12, and 15 are allowable over the art of record.

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VI. Conclusion

For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

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AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 500.40384X00).

Respectfully submitted,
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September 14, 2005